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Worldwide Report

TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

No. 164

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FINLAND-USSR SIGN WIDE-RANGING TELECOMMUNICATIONS PACT

Helsinki HELSINGIN SANOMAT in Finnish 31 Mar 81 p 27

[Text] The first Finland-USSR cooperation agreement involving production of electronic equipment was signed on Monday between Oy Nokia Ab, the USSR Communications Ministry, and the USSR foreign trade company Mashpriborintorg.

The agreement involves coproduction of digital channelling equipment for speech transfer. The equipment is usable in both television and telephone networks and makes it possible to improve the technical characteristics of these networks. It facilitates both the construction of new telephone networks and the operation of the existing cable connections.

According to Nokia, the signing of this agreement will bring in a new dimension to the already 30-year-old economic and scientific-technical relations between Nokia and the USSR organizations in question.

It is hoped that the agreement will lead to widening cooperation in the field of electronics.

The cooperative production will commence in stages, and according to estimates from Nokia, will be in full effect by 1984.

The agreement was signed by Deputy Communications Minister J.B. Zubarev, the general director V.F. Klimov of Mashpriborintorg, and the general manager of Nokia, K. Kairamo.

9571
CSO: 5500/2188

BRIEFS

BAHRAINI-INDIAN NEWS AGREEMENT--An agreement was signed yesterday to exchange news between the GULF NEWS AGENCY and PRESS TRUST OF INDIA. The agreement was signed on behalf of the GULF NEWS AGENCY by its director, General Nabil Ya'kub, and on behalf of PRESS TRUST OF INDIA by its chief editor. [Text] [GF081256 Manama AKHBAR AL-KHALIJ in Arabic 8 May 81 p 1]

CSO: 5500/2204

BRIEFS

MALAYSIA, SINGAPORE SUBMARINE CABLE SYSTEM--Malaysia signed a 138 million ringgit Indian Ocean Commonwealth submarine cable system [IOCOM] with six other Commonwealth countries at a ceremony in Kuala Lumpur today. The agreement on the construction and maintenance of the system was signed by the director general of Telecoms Department, Datuk Mohamed Nadzim, for Malaysia. The other signatories were the respective heads of the six countries' telecoms administrations. The countries are Britain, Singapore, Sri Lanka, Canada, Australia and India. The agreement covers the financial and technical aspects of the system. The IOCOM, which is expected to be operational by the middle of next year, has a capacity of 480 circuits for telephone, telex, telegraph and data services with the terminal ends at Kuala Muda in Kedah and Madras in India. [BK070121 Kuala Lumpur International Service in English 0630 GMT 4 May 81]

CSO: 5500/2204

GOVERNMENT ASKED TO CENSOR ABC BROADCASTS TO INDONESIA

Minister's Proposal

Melbourne THE AGE in English 1 Apr 81 p 1

[Article by Lorenzo Boccabella]

[Text] Canberra--The Minister for Communications, Mr Sinclair, has written to the Minister for Foreign Affairs, Mr Street, suggesting that Radio Australia news broadcasts to Indonesia be vetted by Government officials before going to air.

The Government has not yet made a decision. Mr Sinclair's letter follows allegations by the Indonesian Government that Radio Australia was engaged in a campaign against Indonesia.

This culminated in the Indonesian Government last year refusing to renew the work visa of ABC and Radio Australia correspondent in Jakarta, Mr Warwick Beutler.

Indonesian officials were particularly concerned that Radio Australia's Indonesian language service carried reports about political events in Indonesia which the local news media was banned from reporting.

Radio Australia is part of the Australian Broadcasting Commission and broadcasts local language services on short wave radio to Indonesia, China, Papua New Guinea, Thailand and Vietnam.

The existence of correspondence on Radio Australia was confirmed by Mr Street's office.

The Foreign Affairs Department briefs Radio Australia's news controllers on the countries which receive the broadcasts. The Government is considering whether these briefings should be upgraded.

When commenting on Indonesia's decision to not renew the work visas of several Australian journalists, Mr Street said he regretted the decision but recognised the right of the Indonesian Government to take that action.

Radio Australia journalists based in Melbourne met yesterday to discuss the independence of Radio Australia. The meeting passed several motions on the issue, which will be presented to the ABC and the Australian Journalists' Association.

The independence of Radio Australia is guaranteed by the Broadcasting and Television Act, which says the ABC "may determine to what extent and in what manner political matter or controversial matter will be broadcast or televised."

The Minister for Communications has power to direct the ABC to not broadcast any matter but this must be reported to Parliament. The then Postmaster-General, Mr D. W. Davidson, issued a directive to the ABC in 1963 to not broadcast a programme on Algiers. However the directive was withdrawn and the programme broadcast after protests from the ABC.

There were three other instances between 1943 and 1946 when a Ministerial directive was successfully issued.

On 21 April last year the chairman of the ABC, Mr John Norgard, said regarding the decision to not renew Mr Beutler's visa: "Radio Australia is deeply aware of its responsibilities and wants to encourage friendship between our two countries but this cannot be at the expense of its integrity and credibility.

"Radio Australia has an obligation to broadcast the truth as it sees it, without pressure or restrictions," he said.

Two former Australian ambassadors to Indonesia were critical of Radio Australia's performance in Indonesia after they retired. Former ambassador Sir Keith Shann was reported as saying on 3 November last year that Radio Australia was partly responsible for the loss of Indonesia's "special relationship" with Australia. A later retired ambassador, Mr Tom Critchley, was also critical of Radio Australia.

Government Rejection

Melbourne THE AGE in English 2 Apr 81 p 3

[Article by Lorenzo Boccabella: "Street Rules Out Vetting of Indonesia Broadcasts"]

[Text] Canberra--The Foreign Minister, Mr Street, said yesterday that there would be no significant changes in the way Radio Australia news broadcasts to Indonesia were handled.

Replying to a question in Parliament from Labor MP Mr Kent he said: "There is certainly no question of Radio Australia news broadcasts being censored by officials."

Mr Street confirmed that he had had a letter on the subject from the Minister for Communications, Mr Sinclair.

THE AGE reported yesterday that Mr Sinclair had written to Mr Street suggesting that the broadcasts be vetted by Government officials before going to air.

Mr Street said Radio Australia and the ABC retained editorial responsibility for deciding what material was broadcast and how it would be used.

But he left open the question of future changes to the way news broadcasts to Indonesia would be handled by Radio Australia. "I believe that it would be desirable for Radio Australia to have before it the recommendations of the Dix Committee of Review enquiring into the ABC before any further developments occur," he said.

"Should, as a result of that report, any further consideration be judged necessary, the Government would look at what arrangements under which Radio Australia is established and conducts its operation."

Radio Australia is under the ABC.

Mr Sinclair's letter follows allegations by the Indonesian Government that Radio Australia was engaged in a campaign against Indonesia.

The AJA's assistant federal secretary, Mr Barry Porter, said that if Radio Australia's Indonesian language broadcasts were vetted, the way would be open for vetting its broadcasts to other countries such as China and Vietnam.

The secretary of Aunty's Nieces and Nephews, Ms Meg Paul, said there was a danger that Radio Australia could be turned into "a propaganda machine for Government policy."

The research director of Justice in Broadcasting, Mr Stuart Fowler, acknowledged that Radio Australia's broadcasts were "a problem" in Australian-Indonesian relations, but said: "The question is whether we are going to have a politically independent international and national broadcasting service or one which is an agency of Government policy."

CSO: 5500

BROADCASTING ACT DUE FOR FIRST OVERHAUL IN 16 YEARS

Government Proposals

Canberra THE AUSTRALIAN in English 10 Apr 81 p 1

[Article by Errol Simper and Ted Knez]

[Text] The controversial Australian Broadcasting and Television Act is to receive its first overhaul for 16 years, with its "public interest" provisions being clarified, and stringent provisions relating to share transactions relaxed.

The changes will make it easier for companies with direct or indirect broadcasting interests to [illegible] commercial transactions, and will go some way in eliminating inadvertent breaches of ownership provisions in the current Act.

Announcing the "broad criteria" of the new guidelines to Parliament yesterday, the Minister for Communications, Mr Sinclair, said he expected a bill to amend the Act coming before the House after the Easter recess.

Apart from giving the Australian Broadcasting Tribunal specific guidelines on "public interest" as it relates to commercial television and radio ownership, the changes will allow companies to apply for tribunal ratification of share transactions after share purchase as well as before.

'Shocking Reversal'

They will also allow purchasers to participate in the management of stations before ratification is obtained.

In addition, the proposals would make it easier for institutional investors to retain holdings in companies with television interests without breaching rules stipulating that no company can directly or indirectly hold more than a prescribed--5 percent or more--interest in more than two stations.

The changes were welcomed in Sydney last night by the chairman of the Federation of Australian Commercial Television Stations, Mr Wilf Barker, who said he was particularly pleased with "the opportunity of knowing where we stand with the important issue of public interest."

But the federal Opposition spokesman on communications, Senator Button, claimed the proposals were "a shocking reversal" of recent trends to divorce politics from broadcasting.

Senator Button said the changes would remove the discretion the tribunal could exercise in refusing to grant joint control of the Melbourne television station, ATV-10, to the News group of companies. The ALP fought News' attempt to get a holding in the station, and is opposing its appeal against the tribunal's refusal.

On the question of networking--management links [word illegible] groups of stations--Mr Sinclair said it was necessary for the efficient operation of broadcasting services and would be facilitated by technical advances, such as communication satellites.

He said networking would not be discouraged, provided it did not infringe on the Government's general policy of "fostering and preserving localism."

"The present level of ownership diversity in regional areas will remain unchanged," he said.

He stressed the basic structure of broadcasting decision-making would remain the same.

"The Government will continue to carry the responsibility for the formulation of policy governing the development of the broadcasting system, and the tribunal will retain the responsibility it has had since 1978 for regulation and administration," he said.

Mr Sinclair said the amendments allowed for continued effective public scrutiny.

Public Interest Guidelines

Canberra THE AUSTRALIAN in English 10 Apr 81 p 13

[Article by Ted Knez and Errol Simper]

> [Excerpts] The Federal Government will issue the Australian Broadcasting Tribunal with clear legislative guidelines defining the "public interest" in relation to the ownership and control of commercial television stations.

The Government also proposes giving the Minister for Communications power to add to these guidelines when the tribunal considers licensing matters.

The proposals, and other changes to broadcasting laws, were outlined yesterday by the Minister for Communications, Mr Sinclair, and are expected to be introduced into Federal Parliament after Easter.

The guidelines the tribunal will follow when considering applications are:

--Whether a person or company is fit and proper to hold an interest in a licence.

--Whether the applicant will provide adequate and comprehensive program services, reflecting the needs of the community to be served by the station, and encourage the production of Australian programs.

--The commercial viability of the applicant and his or its technical, financial and management capacities.

--In regional areas the degree of concentration of ownership or control of radio and television.

More particularly, Mr Sinclair said the ABT "shall also take into consideration any additional criteria that might be notified in writing by the minister to the chairman of the ABT."

He said the tribunal would have to publish any "additional criteria" within a month of receiving it as well as including it in the tribunal's annual report.

Mr Sinclair said a further major modification to broadcasting laws involved ownership or control. Some of the key changes in this area were aimed at avoiding delays in the ABT's consideration of major transactions, minimising inquiries and streamlining procedures.

He said proposed amendments would:

--Permit applications for approval or acquisitions to be made after, as well as before, transactions had taken place.

--In the case of major acquisitions (where the purchaser would be in a position to control the licensee company), enable the tribunal to inquire into the acquisition in conjunction with a licence renewal inquiry which, at the request of the applicant, should begin within three months of the application.

--Permit any purchaser to participate fully in the management or operation of the licensee company before a decision.

The Government has also decided to relax the present situation where institutional investors fall foul of that section of the Act prohibiting any company holding more than 5 per cent in more than two television stations.

CSO: 5500

CHANGE IN SATELLITE ORBIT DISADVANTAGEOUS TO WEST

Perth THE WEST AUSTRALIAN in English 11 Apr 81 pp 3,11

> [Text] WA may have been disadvantaged by a decision to change the proposed orbit of Australia's $282 million domestic communications satellite.

Potential users of the satellite in WA were told last year that it would be placed in a geo-stationary orbit above the equator and about 128deg east, the same longitude as Wyndham.

However, the orbit has since been changed to 164deg east, a line that passes between Australia and New Zealand.

Tenderers are working on the assumption that 164deg east is the firm decision--and a spokesman for the satellite project office in Canberra said yesterday that the position would not be changed again.

The doubts about the new position from WA's point of view were raised by Dr Brian O'Brien, a member of the State satellite advisory committee established by the WA Government to set the guidelines for the telecommunication requirements of the State.

Scientist

Dr O'Brien, a former director of Conservation and Environment, is one of the most highly-regarded space scientists in Australia.

His concern is expressed in a so-far-unchallenged report to the Satellite project office.

His main concern is that, at the high radio frequencies on which the satellite will operate, much of the energy of the radio waves will be absorbed by moisture and rain.

In some circumstances this could result in the temporary loss of a signal, which would be particularly costly and inconvenient for commercial users transmitting or receiving computer data or high-speed business information.

Also of concern was the effect on communications in remote areas during emergencies, such as cyclones, when the moisture content in the atmosphere could be extensive.

The satellite is due to become fully operational by mid-1985. Put simply, it will be an assemblage of broadband communications repeaters in space, technologically similar to the microwave repeaters in use in Australia.

Frequency

It will be fitted with about 15 transponders capable of receiving signals transmitted on the "up leg" and retransmitting them on a different frequency on the "down leg" to stations on earth.

Each transponder will be able to handle at least one television channel, several hundred telephone channels or equivalent volumes of data transfer, or a mixture of these.

The justification for the massive expense involved was based largely on the benefits it would bring to Australians who live in remote areas and do not have adequate access to basic telecommunications services.

The project office spokesman said yesterday that the decision to move the orbit farther east was based on a number of complex technical and economic considerations.

The 128deg position had been chosen at first because it was thought that the satellite in that position might also be able to service Antarctic bases and the Indian Ocean for defence purposes.

However, these priorities had changed and the 164deg east position was preferred because it would give a geometric improvement in signal strength by directing the satellite spot beam "edge-on" to the wide expanse of WA.

However, Dr O'Brien said that the degradation of the signals through having to pass at a slant angle through more rain and moisture might often be more than enough to overcome that improvement.

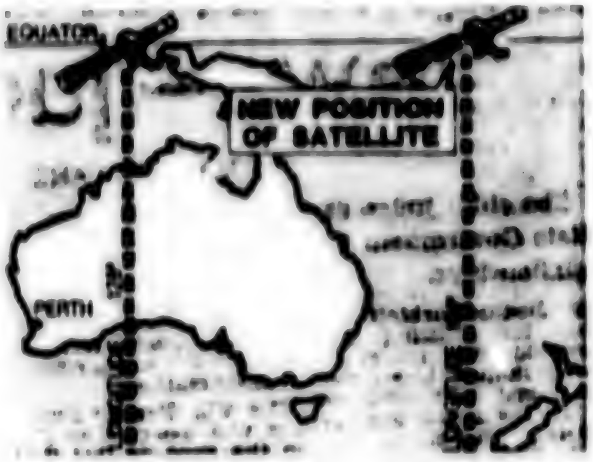
Many studies relied on rain that actually hit the ground, but satellite signals had to pass through the atmosphere and could be weakened by moisture that never actually fell as rain at the point of reception or transmission.

If the satellite was placed at 164deg east, the geometric-type advantages would lead to an improvement of signal strength by only about 35 per cent, ignoring rain and moisture effects.

But the path length of signals to and from the satellite would, for the south-west, be almost twice as long as they would be for 128deg east.

The slant path through rain and moisture for all of northern Australia would also be substantially greater with the satellite at 164deg east.

In his report, Dr O'Brien also challenged the conclusion reached by Telecom after research at Darwin and Innisfail, Queensland that the loss of satellite signal through rain is not increased by the length of the atmospheric path through which it has to travel.



He said the conclusion was contrary to the evidence and common sense that if a signal goes through a longer path of rain, at a lower elevation angle, it will be weaker.

The managing director of a company established to investigate ways for Australian companies to use satellite communications, said yesterday that anyone opposed to the 164deg east position was fighting a lost battle.

Mr Peter Holmes a Court of Business Telecommunications Services Pty Ltd, said that the project office had relied on the best technical advice available to it.

He believed that Dr O'Brien was the only expert who disagreed with the decision.

CSO: 5500

AUSTRALIA

LANDSAT USED IN NSW TO FURNISH AGRICULTURAL INFORMATION

Canberra THE AUSTRALIAN in English 13 Apr 81 p 20

[Text] A joint project between IBM and the American satellite LANDSAT is aiding local agricultural authorities in predicting wheat yields.

Operating at Tamworth and Narrabri in north-western NSW, the project's aim is to test the possibility of using LANDSAT data in identifying and measuring selected agricultural products--including sorghum, oats and barley--and forecasting future crops.

IBM's Earth Resources Management (ERMAN II) software is a major tool in the research project and an advanced LANDSAT analysis facility has been set up at IBM's computer centre in Sydney.

LANDSAT, orbiting 920km above the earth, completes a sweep of the earth every 18 days, taking "pictures" in four light wavelengths--green, infra-red, near-infra-red and red--of the surface.

Magnetic tapes of the data are then used at IBM's computer center to reconstruct images.

Active green vegetation, for instance, has a high reflectance in the infra-red band but is low on others, while a dry, white salt pan reflects sunlight across all wavelengths.

Wheat is notoriously difficult to "label" accurately in Landsat pictures--in early spring for instance, it is almost impossible to distinguish the green shoots from grass.

Mr Eric Leggett, principal officer of the NSW Department of Agriculture, said if the crop forecast system could be applied accurately the Australian Wheat Board would enjoy considerable marketing advantages.

"We eventually hope to monitor much of our agricultural production and detect crop diseases early enough for us to take action before to much damage is done," he said. [as published]

Each picture, or "scene," covers 185km and is made up of individual units, or pixels (picture elements), each 57m by 79m.

After processing--via ERMAN registration--the data is resampled to 80m by 80m. The pixels are interpreted electronically into fine gradations of grey, depending on the actual "radiance value" from the earth's surface.

The gradations are then coded numerically and transmitted to receiving stations on earth.

The major task is to identify the wheat's "signature", or set of radiance values, which will represent the crop at various stages of growth on various types of soil.

This is done by combining data from several satellite overpasses into a single image entering via a color terminal. Here it is matched with "ground truth" data collected by research teams.

Researchers travel through growing areas questioning farmers, mount sensors on trucks to measure light radiation and simply walk around the ground judging the area.

When the computer processing techniques have been sufficiently refined the LANDSAT data should match "ground truth" consistently enough to be an accurate tool for recognising wheat fields from the satellite--and for predicting national crop yields.

IBM's Landsat project manager, David Beach, said the system was becoming more and more accurate.

"At present we are looking at areas of 80 sq m, but when the next generation of satellite goes up we'll be able to have a resolution of only 20 to 30m square."

Until now the project has used LANDSAT data tapes provided by NASA, but will soon use information from a recently installed Landsat tracking station at Alice Springs.

The satellite has already been successfully used in conjunction with IBM, completing various projects, including:

--Mapping parts of Antarctica and reefs off the West Australian coast and updating of maps of the Great Barrier Reef.

--A study of geological faulting in the Sydney Basin.

--The search for distinctive areas of rock types in Western Australia's Fortescue region which are associated with copper deposits.

--Assessment of the extent of flooding in Queensland's channel country, where the cost of aerial photography would have been prohibitive.

--A pilot study for a broad ecological survey of the continent.

--A CSIRO project aimed at detecting potential oilfields around the coast.

The Victorian Country Fire Authority has just gone into partnership with IBM Australia and Melbourne's Monash University to test the feasibility of using LANDSAT to map fire danger areas.

According to the Assistant Chief Fire officer, Jim Barber, it could be used to create an early warning system by examining vegetation signatures.

In the research project LANDSAT 2 will scan Victoria's western district every 18 days. Aerial photography will provide a back-up in case of cloud cover and field teams will gather ground information.

A study of salinity in farmland in the Murray Valley has also been undertaken using the LANDSAT sensors and cameras.

CSO: 5500

EIGHT MEDIA UNIONS VOICE OPPOSITION TO CABLE TELEVISION

Canberra THE AUSTRALIAN in English 15 Apr 81 p 22

[Article by Nicholas Rothwell]

[Text] Representatives of eight powerful media unions have passed a resolution against the introduction of cable TV in Australia using current technology.

The resolution was the most important passed at an ACTU conference on unions and the media, held in Sydney, and will be presented to the ACTU Executive in September.

The motion, drafted by the Actors and Announcers Equity Association, asks the ACTU to adopt systematic principles for the regulation of cable TV in Australia.

The motion stipulated Telecom should be the "common carrier" and own all the facilities of any cable system.

Present cable TV relies on coaxial cables, but the media unions decided to back a system which is not likely to be commercially available for the next seven years--optical fibre cable TV, which is transmitted down hair-thin glass-fibre wires.

Union delegates said optical fibre TV would allow the transmission of more than 80 channels of television and would quickly supersede coaxial cable TV.

The motion specifically opposed cable TV in Australia before the commercial proving of optical fibre systems.

But the unionists were warned attempts would be made by the "multinational companies" which controlled the communications industry world-wide to introduce cable TV in Australia.

They were also told cable TV channels which could be introduced here would be identical in programming to those shown in the United States and would turn Australia into a satellite of US culture.

The problems of cable as a means of communication, rather than simple broadcasting, had not been adequately discussed by the Australian Broadcasting Tribunal, the body appointed to review the implications of cable technology for Australia, delegates said.

The unions also resolved that cable TV should not be open to full private ownership. Otherwise, they said, the control exercised over Australian telecommunications by a limited number of media companies would be extended.

The unions asked the ACTU to support a policy under which individual cable channel licences would only be granted by a licensing board with the responsibility to maintain a balance between the services offered.

A zoning system for licences was recommended which would ensure those living in areas least attractive in a commercial sense for private cable operators obtained adequate cable services.

The motion would restrict cable licences to a limited number of channels per region and further restrict licence-holding by a national limit for each operator.

The unions also recommended the ACTU adopt a policy preventing "any owner of a licence for commercial television" from owning a cable licence, and limiting shareholding in cable companies by any such operators to a 5 per cent maximum.

Cable TV program regulation was also called for, in line with the recommendations of the Broadcasting and Television Act, requiring half of all cable transmissions over each channel to be locally produced, and "a number of channels" within each zone to be reserved for community access.

Regionally-made programs should also be given a special channel, operated by an industry body backed by the Australian Film Commission and the State film corporations, the unions said.

Advertising would be banned on all paid cable TV, the unions recommended.

CSO: 5500

SATELLITE RECEIVER WILL PROVIDE METEOROLOGICAL DATA

Perth THE WEST AUSTRALIAN in English 18 Mar 81 p 3

[Text] A "scrounge job" by scientists from the CSIRO Division of Land Resources Management and the WA Institute of Technology has given Australia its first satellite receiving station for monitoring sea and cloud temperatures as a satellite passes overhead.

By stretching their ingenuity to recycle outmoded equipment they have built the station at WAIT for about $6000, not including salaries and existing computer facilities.

The market price for a similar system would be about $250,000.

Project "Scrounge" is the first collaboration between the CSIRO and WAIT's department of electric and electronic engineering. It is expected to be in operation within a month.

The station will cover an area from the Equator to the edge of the Antarctic ice, with an east-west axis extending from Tasmania to 4000 kilometres into the Indian Ocean.

It will give accurate information on:

--Sea temperatures to help fishermen.
--Sea temperatures relating to water movements on the North-West Shelf.
--Regional geology throughout Australia.
--Regional cloud temperatures and soil moisture studies.

The project is led by Dr Frank Honey, head of the CSIRO's remote sensing group at Floreat and Dr Bill Carroll, a senior lecturer in the school of electrical and electronic engineering.

Dr Carroll is also head of WAIT's satellite technology centre.

The CSIRO could previously get meteorological information via the United States from Landsat and the Tyros and NOAA satellites but it took up to eight weeks to come through.

This was too long for fishermen, who need it almost immediately.

Cloud seeders also work on a critical time scale.

Ideally they need to have the cloud temperatures as soon as possible after the satellite passes over.

The new system could cut the time to half an hour and give cloud temperatures to within 0.1 degrees centigrade.

CSO: 5500

SOVIET SATELLITE BLAMED FOR AIRPORT RADAR INTERFERENCE

Canberra THE AUSTRALIAN in English 6 Apr 81 p 3

[Article by Toni McRae]

[Text] A Russian spy satellite is under fire for causing interference to airport radar systems in Australia. The satellite, which provides Over the Horizon Radar (OHR), has been dubbed "The Russian Woodpecker."

The Woodpecker makes a high-pitched rapid tapping sound--about 10 taps a second--which has been interfering with airport radar and the CB frequency, while other air-to-ground, ship-to-shore and land mobile radio links have also been affected.

Radio operators say the Woodpecker could blot out a distress call and pose a serious threat to human life.

In Canberra yesterday a spokesman for the Russian Embassy would not comment on the reports, saying he "knew nothing about it."

But the Federal Department of Communications received complaints in May last year that an unidentifiable radar system was interfering with airport radar in Sydney.

By a long process of elimination, the problem was tracked down as the Soviet OHR satellite, which was in orbit at the same time.

No further airport radar interference was reported until a few weeks ago, when the Woodpecker was identified again as the culprit.

Little is known in the West about how the Russian OHR system works, but it is believed the satellite is capable of detecting and tracking fast-moving targets, such as aircraft or the new cruise missile, at ranges of up to 2800km and altitudes as low as 15m.

Amateur radio operators in most countries have been asked by a group of Australian operators to campaign against Woodpecker.

In Melbourne yesterday the "Stop the Russian Woodpecker" campaign committee chairman, Mr Jim Linton, said there would be concerted efforts in the next few weeks to make representations to the Soviet Ambassador to Australia, Dr Nikolai Soudarkov, to have the system changed.

Mr Linton said letters had been sent to senior Federal Cabinet ministers this weekend complaining that the Woodpecker was endangering lives. He said it was unlikely that Australia was the only country affected by the Soviet system.

"CB is also the major band for air-to-ground communications in most countries," he said. "The Woodpecker interferes with CB, which is itself a system where signals can travel many thousands of miles, so it would not be unusual for a distress call on the Gulf of Carpentaria to be picked up as far away as Victoria.

"The Russian satellite, however, can completely destroy this sort of 'skip' communication."

It is necessary for OHR equipment to change operating frequencies constantly to permit continued tracking of targets. It is this need to change frequency which forces the Russians to shift their signals through the commercial broadcast band, the HF amateur and CB frequencies and even international emergency bands.

Mr Linton claimed such interference was not a necessary and unavoidable by-product of a successful OHR aircraft detection system.

[Editor's Note: According to the Perth THE WEST AUSTRALIAN, 7 April 1981, page 43, "The Soviet Union's new long-range military radar system was not affecting official maritime or air-radio communications, a spokesman for the Australian Coastal Surveillance Centre said yesterday. There had been no reports of interference to the centre, to Transport Australia or to the Overseas Telecommunications Corporation, he said."

CSO: 5500

FRENCH, BRITISH HOME TV DATA SYSTEMS IN TESTING STAGE

Canberra THE AUSTRALIAN in English 6 Apr 81 p 3

[Text] The ABC will begin test transmissions of a home television data system, known generally as teletext, today.

The Minister for Communications, Mr Sinclair, said tests of the French Antiope system would allow the ABC to compare it with the British Prestel system now under evaluation.

Mr Sinclair said some television stations started transmitting data services in February last year after the Government authorised a three-year trial.

Viewers with special decoding devices could receive information displayed in "page" form on their television screens.

The system can provide up-to-date information in areas such as general news, weather, stock market reports, transport timetables and sport.

Mr Sinclair said several data broadcasting systems were being developed overseas. As well as Prestel and Antiope there was Telidon, developed in Canada.

"It is important to try as many systems as possible before deciding on the most suitable for Australia," Mr Sinclair said.

"Factors which must be taken into consideration include the reliability of the system, its cost to the consumer and operator, and its suitability in providing captions for those with impaired hearing.

"I should like to reaffirm statements made by my predecessor, Mr Staley, in February 1980, that we will review the various systems at the end of a three-year trial period before deciding on a suitable system for Australia."

CSO: 5500

UP TO $21 BILLION TO BE SPENT ON TELECOM IN NEXT DECADE

Sydney THE SYDNEY MORNING HERALD in English 31 Mar 81 p 8

[Text] The Federal Government will spend as much as $21 billion over the next 10 years on new communications equipment for Telecom, Australia Post, the Overseas Telecommunications Commission and the Australian Broadcasting Commission.

This will include expenditure on a new domestic satellite, to be working by mid-1985, which will relay radio and television programs, Australia-wide according to the Minister for Communications, Mr Sinclair.

Mr Sinclair said a study done by his department estimated the cost of capital investment by the four authorities in the next 10 years at $14 billion on present prices.

This figure rose to $21 billion when inflation was taken into account.

The figures seem enormous, but they are quite in order, according to Mr Sinclair's press secretary, Mr Geoffrey Hole.

"If you take Telecom alone, you find that this year it will be raising $300 million or 25 per cent of its revenue, through Telecom debentures. That brings total revenue to $1.2 billion," he said.

Mr Sinclair said the total cost of the satellite program to the public sector was estimated at $282 million, spread over three years beginning in the middle of next year.

The capital equipment would consist of one operating satellite and one stand-by satellite, both in orbit, a spare satellite and two tracking and control systems on the ground.

Also on the ground would be earth stations and other back-up equipment.
Mr Sinclair said Telecom would use the satellite system to provide telephone services to remote areas at a cost of $80 million, plus $4 million a year in running costs.

Transport Australia would spend more than $16 million in capital costs for 240 stations that would greatly assist air traffic control and establish voice-link VHF repeaters via the satellite. Tenders for the satellite itself would close on May 4 this year, and the Government was already deeply involved in discussions with [word illegible]

CSO: 5500

NEXT 3 MONTHS CRUCIAL TO SPACE TECHNOLOGY DEVELOPMENT

New Delhi PATRIOT in English 17 Apr 81 p 2

[Text] The next three months will be exciting as well as crucial in further development of India's space technology and its application for the development of national resources and the economy. For, as many as three Indian satellites are to be launched during these months. Two of these satellites are to be launched with the cooperation of friendly powers using their launching facilities as well as their launching vehicles. The third--Rohini Satellite II--will be launched from the Sriharikota range, using the four-stage rocket launcher, SLV-3, similar to the one employed for launching the first Rohini satellite, shot into space orbit just nine months ago on July 19, last year.

India's first communication satellite, Ariane Passenger Payload Experiment (APPLE) is expected to be launched in May with the help of the launch facilities of the West European Space Agency. The APPLE space satellite has the objective of establishing India's capability to build and launch a stabilised, geostationary communication satellite with its own apogee propulsion and orbit control systems.

The APPLE has been lying ready for being launched into space for several months, the delay in the launching being caused by the Western launching system's problems and the search for appropriate timing of the launch. Designed and built at ISRO centres, the APPLE incorporates several indigenous systems, such as indigenous lightweight CFEP antenna the main buss systems. Besides a number of major subsystems and components have been procured from foreign suppliers. The compatibility of APPLE with the European Space Agency's ground station was established through compatibility tests conducted by ISRO engineers at Toulouse, France.

The APPLE spacecraft will be used on an experimental basis for a wide variety of applications the most important being extensive use of the communication capability of the satellite. A detailed plan for this purpose has been prepared by ISRO and ground receiving and transmitting systems developed.

The second satellite to be projected into space is SEO-II--a satellite similar to Bhaskara--expected to be launched in June from a Soviet cosmodrome using a Soviet launcher rocket as was used in Bhaskara I. The Indian and Soviet space agencies have already come to an agreement for this launching.

The Satellite for Earth Observation (SEO-II) will make use of the development work completed for Bhaskara, thereby saving cost and time. Besides providing a launch free of cost, the USSR will also supply tape-recorders, solar panels and batteries required for SEO-II.

The configuration of this spacecraft is similar to Bhaskara's based on the ground simulation on Bhaskara's prototype model. Certain modifications have been incorporated on some of the electrical circuits of SEO-II as also on its TV payload, to avoid some of the problems encountered by Bhaskara initially. SEO-II will also carry a more powerful radiometer than Bhaskara's--a 31 GHz radiometer, in addition to the 19 and 23 GHz radiometers on board Bhaskara.

India's third satellite to be launched soon--Rohini satellite-II--from India's own satellite launch range at Sriharikota, using a launch rocket similar to SLV-3 which put Rohini Satellite-I into space orbit--awaits the launching operation. This launching is also expected some time in June this year. The Rohini Satellite-II will, like its predecessor, be largely devoted to 'remote sensing' and mapping of India's resources and earth structure.

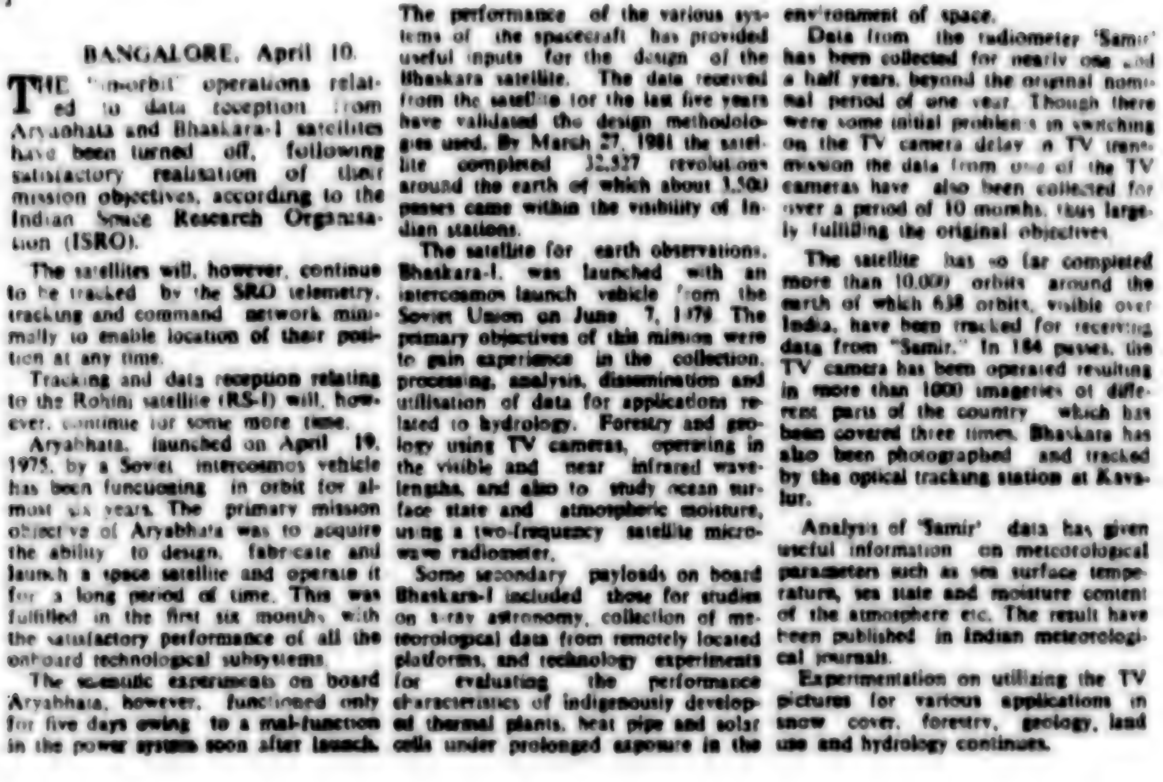
The completion of these three satellite launching operations will mark an important phase in India's developing space technology and its diverse applications for uses in the economy. The ground then will be ready for the next phase in India's satellite building as well as developing more powerful satellite launch rockets. ISRO plans to launch a semi-operational remote sensing satellite during 1984-85, weighing 600 kg, using an indigenous launch rocket.--(IPA)

CSO: 5500

COUNTRY'S SATELLITES REPORTED TO ACCOMPLISH AIMS

Bombay THE TIMES OF INDIA in English 11 Apr 81 p 9

[Text]



BANGALORE, April 10.

THE "in-orbit" operations related to data reception from Aryabhata and Bhaskara-I satellites have been turned off, following satisfactory realisation of their mission objectives, according to the Indian Space Research Organisation (ISRO).

The satellites will, however, continue to be tracked by the SRO telemetry, tracking and command network minimally to enable location of their position at any time.

Tracking and data reception relating to the Rohini satellite (RS-I) will, however, continue for some more time.

Aryabhata, launched on April 19, 1975, by a Soviet intercosmos vehicle has been functioning in orbit for almost six years. The primary mission objective of Aryabhata was to acquire the ability to design, fabricate and launch a space satellite and operate it for a long period of time. This was fulfilled in the first six months with the satisfactory performance of all the onboard technological subsystems.

The scientific experiments on board Aryabhata, however, functioned only for five days owing to a mal-function in the power systems soon after launch. The performance of the various systems of the spacecraft has provided useful inputs for the design of the Bhaskara satellite. The data received from the satellite for the last five years have validated the design methodologies used. By March 27, 1981 the satellite completed 32,327 revolutions around the earth of which about 3,500 passes came within the visibility of Indian stations.

The satellite for earth observations, Bhaskara-I, was launched with an intercosmos launch vehicle from the Soviet Union on June 7, 1979. The primary objectives of this mission were to gain experience in the collection, processing, analysis, dissemination and utilisation of data for applications related to hydrology, Forestry and geology using TV cameras, operating in the visible and near infrared wavelengths, and also to study ocean surface state and atmospheric moisture, using a two-frequency satellite microwave radiometer.

Some secondary payloads on board Bhaskara-I included those for studies on x-ray astronomy, collection of meteorological data from remotely located platforms, and technology experiments for evaluating the performance characteristics of indigenously developed thermal plants, heat pipe and solar cells under prolonged exposure in the environment of space.

Data from the radiometer 'Samir' has been collected for nearly one and a half years, beyond the original nominal period of one year. Though there were some initial problems in switching on the TV camera delay in TV transmission the data from one of the TV cameras have also been collected for over a period of 10 months, thus largely fulfilling the original objectives.

The satellite has so far completed more than 10,000 orbits around the earth of which 638 orbits, visible over India, have been tracked for receiving data from "Samir." In 184 passes, the TV camera has been operated resulting in more than 1000 imageries of different parts of the country which has been covered three times. Bhaskara has also been photographed and tracked by the optical tracking station at Kavalur.

Analysis of 'Samir' data has given useful information on meteorological parameters such as sea surface temperature, sea state and moisture content of the atmosphere etc. The result have been published in Indian meteorological journals.

Experimentation on utilizing the TV pictures for various applications in snow cover, forestry, geology, land use and hydrology continues.

CSO: 5500

BRIEFS

RADIOTELEPHONE INSTALLATION--Nizamabad in Andhra Pradesh and 14 other districts all over the country have been selected for the introduction of radio telephones, reports PTI. According to General Manager of Andhra Pradesh Tele-Communications T. Hanuman Chowdary some 40 villages of Nizamabad will be linked by multi-access public telephones connected not by wires but by the modern--Very High Frequency (VHF) radio technology. The base station will be at Armoor ad radio packages would be kept sealed in small huts in 42 other villages. [as published] The village grocers shop will have the telephone linked by wire to the village radio hut. Mr Chowdary says the radio telephone system will in part be powered by solar cells and winddrive generators. The Rs 42-lakh Nizamabad project is scheduled to become operative by December 1982. Mr Chowdhary, in Delhi for the All-India Conference of Telecommunication and Telephone General Managers, said an integrated electronic telephone network would be operational by 1985 in the Krishna district of Andhra Pradesh and 17 districts in other States. A telephone subscriber will be able to directly dial any other subscriber anywhere in the district without the intervention of the operator at the exchange. The Krishna district project is estimated to cost Rs 5 crores. [Text] [New Delhi PATRIOT in English 13 Apr 81 p 6]

MULTIPURPOSE SATELLITE--On May 4 Minister of Information and Broadcasting Vasant Sathe disclosed in the Rajya Sabha in a written reply to a question by N. P. Chengalray Naidu that the Indian national satellite (INSAT III) is expected to be launched in early 1982. Amongst other usages it is proposed to be utilised for telecast of educational programmes. The minister said that this was a multipurpose satellite. In addition to having communication and meteorology payloads it would also have two television transponders for two broadcast channels. These are capable of providing TV coverage to almost the entire country except some parts in the eastern and north-western regions which would have only secondary coverage. Sathe informed the House that the scheme for utilisation of INSAT-1 for radio and television coverage was being finalised taking into account the recommendations made by the interministerial working group and the availability of resources. [Text] [BK060605 Delhi ISI Diplomatic Information Service in English 1504 GMT 4 May 81]

SATELLITE STATIONS PLANNED--Bangalore, April 17 (PTI)--The Oil and Natural Gas Commission is establishing three satellite communication earth stations, two at Bombay High platforms and one at Uran near Bombay, for monitoring of oil well performance and safety data through telemetry, for command and control purposes. The Posts and Telegraphs Department is establishing 31 earth stations, 28 fixed and three transportable, for utilisation of the INSAT-one system telecommunications capability, a Space Department report said. [New Delhi PATRIOT in English 18 Apr 81 p 10]

CSO: 5500

BRIEFS

SATELLITE COMMUNICATION LINK--Jakarta, 5 May (ANTARA)--In the course of years up to 2000 Indonesia will start electrification of the country on a large scale, it was announced by Minister for Research and Technology Professor Dr B. J. Habibie here Monday [4 May]. He said such large-scale electric power projects must be supported with the most modern and stable technology. Delivering a message before the first national convention of electric engineers here, Minister Habibie said that up to 2000, Java island alone would need some 25,000 megawatts in electric power. Habibie was quoting figures of the PLN State-Electric Corporation. Modern communication channels to link Sabang in the northwesternmost part of the country with Merauke in Irian Jaya would also call for the operation of at least three Palapa satellites and tens of small earth satellite stations. He said these development ventures would be included in the country's successive 5-year plans. The country was now engaged in its third plan. [Excerpt] [Jakarta ANTARA in English 0716 GMT 5 May 81 BK]

CSO: 5500/2203

MONGOLIA

BRIEFS

TELECOMMUNICATION LINK VIA SATELLITE--The forthcoming 15th MPRP Congress and celebrations marking the 60th anniversary of the Mongolian People's Revolution will be transmitted via the "Intersputnik" system from Ulaanbaatar. Mongolian communicators and Soviet specialists have installed transmitting equipment on the "Orbita" station enabling other countries, who are members of the "Intersputnik" international space communications program, to receive televised programs from the MPR. A telephone and telegraph link will also be installed via the "Orbita" station in the future. [Text] [SK081338 Ulaanbaatar MONTSAME in Russian 1445 GMT 4 May 81]

CSO: 5500/2204

RAILWAYS INSTALLING MICROWAVE TELECOM SYSTEM

Karachi DAWN in English 4 May 81 p 13

[Text] Pakistan Railways have launched a project for the installation of a modern and dependable microwave tele-communication system for efficient operation of the railway.

According to the railway authorities, the Rs 723.3 million project is scheduled to be completed by 1982-83.

The contract for the supply and installation of the equipment has been given to messers Kentron Pakistan Inc. Detailed route survey has since been completed and survey reports are being finalised. Soil survey is still in progress.

The project envisages installation of 960 channel microwave and 36 channel ultra high frequency (UHF) system from Rawalpindi to Karachi along the main railway line and on Kotri-Habib Kot, Sukkur-Jacobabad-Kot Adu branch lines over a distance of about 2,000 kilometers and very high frequency (VHF) radios on about 500 locomotives. This will provide tele-communication facilities between different control offices at Lahore as well as between important stations of Pakistan Railways.

Under this project, direct dialing facilities will be provided at most of the stations and old and obsolete block instruments be replaced with automatic signalling at 70 stations. Besides, a switching processor will be installed at Lahore and Data terminal to about 80 locations. This will facilitate exchange of operating and administrative messages. The messages will be stored in the system and their retrieval will be possible any time subsequently.

With the introduction of the modern system, not only the train operation will improve, but it would also open up doors to other sophisticated systems such as computerised traffic control, seat reservation, hot box detectors, automatic train control, etc.

A training centre is being set up for imparting necessary training to the staff for running the modern tele-communication system.

Meanwhile, a batch of 40 wireless mechanics has been sent to various telephone training centres for one year training in munications.--APP.

CSO: 5500/4577

BRIEFS

TELECOMMUNICATIONS SATELLITE PLANNED--Amman, 4 May (OPECNA)--The first Arab telecommunications satellite is expected to be in operation by 1983. The American space-shuttle Columbia will carry the satellite into orbit 22,500 miles above the Earth. At a meeting here, the Arab Organization for Space Communications (AOSC) decided to award the contract for the manufacture of the satellite to an international company. A supporting Earth station will be built in Saudi Arabia. After the Amman meeting, the director general of AOSC, Dr 'Ali al-Mashat, said he hoped the satellite project would be completed by 1983. He said the satellite would provide 8,000 telephone lines and six television channels. AOSC has reserved the necessary launching facilities with the U.S. National Aeronautics and Space Administration. The meeting, attended by Algeria, Jordan, Kuwait, Lebanon, Morocco, Qatar, Saudi Arabia, Syria, Tunisia and the United Arab Emirates, decided to increase the AOSC budget to 200 million U.S. dollars. [Excerpts] [LD051415 Vienna OPECNA in English 1550 GMT 4 May 81]

CSO: 5500/2203

SATELLITE INFORMATION SYSTEM FOR MEDICAL RESEARCH

Kuwait KUWAIT TIMES in English 14 Apr 81 p 4

[Article by Dr Azimusshan Haider]

[Text]

For the first time in any Arab country the satellite-aided device for getting instantanaous response from overseas to queries connected with medical research and public health is now being introduced — in Kuwait. The system is commonly known by its acronym of MEDLARS (Medical Research Analysis and Retrieval System). Its instantomatic variation is more specifically called MEDLINE — MEDLARS on-line.

MEDLINE service is provided by what is said to be the world's biggest medical library, the National Library of Medicine (NLM) at Maryland, USA. The initiative for commissioning this service for Kuwait was taken by Health Minister Dr. Abdul Rahman Al Awadhi, and the Council of Ministers approved the proposal.

Kuwait University is also involved in the project, as one of the terminals for receiving the communication with NLM through satellite will be installed at the university's teaching hospital of Mubarak Al Kabir. The Health Ministry assigned Kuwait University Libraries Department Director Sulaiman Kalander to bring into shape an arrangement, and an agreement between the Health Ministry and the NLM was eventually concluded after three years of protracted negotiations.

FAST-MOVING

Sulaiman Kalander explained that MEDLINE is the most modern technique of communicating medical information swiftly. The utility of such information-sharing among different countries as well among various institutions within a country has been appreciated for long. NLM has been producing a multi-volume publication entitled Index Medicus to provide abstracted information on a comprehensive list of subjects related to the medical and health sector. NLM also added to its service the despatch of magnetic tape by mail in response to queries from outstation.

However, the fast-moving pace of findings in medical research and medicinal discoveries necessitated a faster technique of communication of knowledge. Moreover, searches relevant to the ever-growing medical sciences and public health made it necessary for researchers and practising doctors to get an information swiftly for best results.

Health Ministry's Adviser for Libraries, Ahmed Habib Kidwai, explained that to respond to enquiries of urgent nature, the device of supplying the information on television screen through conventional television channel was conceived. This worked well for a certain limited range.

CONSOLE

However, for long-range overseas exchange the conventional TV range was inadequate. Hence latest telecom device of satellite was brought into commission for MEDLINE service.

About the arrangement stipulated for Kuwait, Sulaiman Kalander said that there will be at least two — maybe three — terminals or nodes for Kuwait. One will be installed at Mubarak Al Kabir Hospital, which is the teaching hospital of Kuwait University. Another will be at Al Sabah Hospital which is a major centre for treatment. A third terminal may be installed at the Ministry of Health itself.

The queries from here will be transmitted to the computer on the other side (that is at Maryland) by operating the "console" — a sort of keyboard — that forms part of the total apparatus which will also include the TV screen. The operator can "talk" to the computer by just manipulating the keyboard, and the computer will "reply" directly on the TV screen — that is provide on-line service, which is the essence of MEDLINE. If a "request" is made to the computer at the other end, it will also prepare a "print-out," not necessarily for on-line despatch.

OFF-LINE

Sulaiman Kalander revealed that for handling the MEDLINE apparatus, two persons, who are librarians, in the medical college library here, have been nominated for being sent to the USA on a month-long training. They are (Miss) Moodi Saif and Habib Al Faras.

The agreement stipulates that in addition to a MEDLAR demand service and a supporting bibliographic system, the range of other services may include "the selective dessemination on information to individuals or groups, localised on-line retrieval systems, or operating on a whole or part of the data base, publication of select literature searches," etc.

Besides on-line response, an off-line search service will also be available. An off-line search is defined as one executed against a data base with directories and citation files, including backfile searches.

The range of subjects of great importance for medical research and public health cover, inter alia, such services as CANCERLINE, HISTILINE, TOXLINE, CHEMLINE and CLINPROT, whose significance is evident from the indications given by these acronyms.

The main cost of the project apparatus, etc., is to be worked out.

DATA BASE

It is relevant to note that the devices to arrive at required information swiftly, on-line as well as off-line, are by now prevalent in several technologically developed countries and in more than one field of knowledge.

In his book "an introduction to university library administration," John Thompson of the Univeristy of Reading points out that the majority of British university libraries now offer, or plan to offer, access to a large number of data bases available in most subjects.

The best-known include MEDLINE which dates from 1966 and by 1977 contained approximately 2.5 million references from some 3,000 biomedical journals. Another service has the acronym of CHEMLINE, a chemical dictionary file containing some 98,000 records by March 1977.

Yet another is INSPEC which is concerned with physics, electrical and electronic engineering computers and control and had more than one million citations. AGRICOLA, representing the journal and monographs of holdings of the US National Agricultural Library, had 970,000 entries by 1977

CSO: 5500/4716

INMARSAT EARTH STATION PLANNED TO BE OPERATIONAL IN LATE 1982

Kuwait KUWAIT TIMES in English 9 Apr 81 p 2

[Text]

AN INMARSAT Coast earth station is to be located at the satellite earth station complex at Um Al Aish

At the instance of the Ministry of Communications a notification calling for tenders for carrying out importation, installation and pre-operational test of the station has been published by the Central Tender Committee in the official gazette

The object of the new maritime earth station is to provide communication service through satellites between Kuwait and vessels at sea and ports of the world. It is expected that the station will become operational in the latter half of 1982.

Kuwait is one of the countries which are very much concerned wit h the development of maritime activities and the country forms the headquarters of three of the largest shipping companies in the east, namely — United Arab Shipping Company, Arab Maritime Petroleum transport company and Kuwait Oil Tanker Company. It has therefore been considered increasingly essential that participation in maritime communication through satellite should become part of the country's contribution to international trade

SERVICES

The communication system will be available between ship crew at sea with any part of the world equipped with a similar coast earth station operating through the Inmarsat system. The most important services will be telephone and telex communication and communication required for the safety of life at sea. Apart this services such as facsimile, data transmission, etc. will also be available. The international maritime satellite organisation (Inmarsat) provides the space segment for the system such as, satellites and their accessories by means of which the Kuwaiti coast earth station will operate.

Today, **Abdul Rahman Al-Ghunaim** Undersecretary for the Ministry of Communications will leave to Auckland in New Zealand to attend the eleventh meeting of signatories to the agreement on international satellite organisation (Intelsat).

CSO: 5500/4716

GHANA

NEW SATELLITE EARTH STATION, TELECOMMUNICATIONS IMPROVEMENTS

Accra DAILY GRAPHIC in English 14 Apr 81 p 1

[Article by Yaa Edusei]

[Text] The ₵16 million Satellite Earth Station at Kuntanase on the Accra-Nsawam road will be commissioned next month by President Hilla Limann.

In connection with the commissioning elaborate preparations are underway to make the occasion a great day.

Mr Harry Sawyerr, Minister of Transport and Communications who disclosed this to me in an interview, said the project's drawback had been the pilferage of wires.

He, however, expressed the hope that with the introduction of a microwave system less wires would be used in its construction.

The construction of the project which began on December 15, 1977, will on completion have the most modern facilities including the reception of live television broadcasts from other countries.

Ghanaians would also be able to make automatic external telephone calls. This will help in the quick despatch of cables and the general improvement in the country's telex system.

Mr Sawyerr disclosed further that with the assistance of the Economic Community of West African States (ECOWAS), another microwave network linking Accra with Bolgatanga through Koforidua, Kumasi and Tamale would be established to enable areas which had been deprived of the use of telecommunication facilities to benefit from the system.

The Minister also said that a contract had been awarded for the construction of Ghana's portion of the Pan-African Telecommunication network which would run between the Togo-Ivory Coast borders.

He said this would facilitate communications within the African sub-region.

Mr Sawyerr gave the assurance that his Ministry was doing everything possible to improve the internal telephone network.

CSO: 4500

GHANA

UNDERGROUND CABLE THEFTS PARALYZE TELECOMMUNICATIONS SYSTEM

Accra GHANAIAN TIMES in English 16 Apr 81 pp 1, 3

[Article by Kojo Sam]

[Excerpts] Communication links between Ghana and the rest of the world have been temporarily suspended following thefts of underground cables at three different places between the Accra Central test room and the Bubuashie transmission station this week.

Commercial concerns and individuals who depend on radio telephone, telex, telegrams, cablegrams and leased telegraph facilities to transact business with the international community cannot be served by the Post and Telecommunications Corporation till replacements have been effected on the affected cable points.

And according to Mr Benard Godson Hadjah, senior public relations officer of the corporation, the regularity at which these thefts are being carried out gives one the feeling that it is not a criminal act any more but a deliberate and sustained effort to sabotage the national economy."

Speaking to the 'Times' in Accra yesterday over the rampant cable thefts, Mr Hadjah, who deeply disturbed, said the latest (last Tuesday) was about the fourth this year alone.

"And this is not to mention cases in which cables serving areas such as Korle-Bu, Mamprobi, Bubuashie, Mataheko, Kaneshie and other western parts of Accra.

"At any rate, it is believed that some members of staff of the corporation are involved in these diabolical acts, judging from the 'expertise' these illegal businesses are carried out, he stressed.

Asked to explain why the rampant cable thefts, Mr Hadjah said it had come to the notice of the corporation that the thieves converted the cables into pellets, leads for fishing, and bullets for hunting. The copper wire is melted and then exported illegally to neighboring countries, particularly, the Ivory Coast, for the manufacture of jewelleries.

He suggested that the Government ban the public from dealing in cable scraps.

CSO: 5500

BRIEFS

CANADIAN TECHNICAL AID—Nigeria will welcome Canada's technical assistance and expert advice, particularly in the areas of maintenance, training and manufacturing of telecommunications equipment. The minister of state in the Ministry of Communications, Chief Iteng Okoi-Obuli, stated this during an exchange of views with the visiting Canadian Minister of State for trade, Mr. Edward Lumley, who paid him a courtesy call in his office in Lagos last Monday. He told the Canadian Minister of the on-going projects being undertaken by his ministry such as the construction of special design post offices, new telephone exchange, domestic satellite stations and aerostat balloons. Chief Okoi-Obuli added that when the ministry's various projects were completed, communication between one part of the country and the other would be made easier. In his reply, the Canadian minister spoke of telecommunications as essential social services throughout the world, he commended the role being played by Nigeria in the International Telecommunications Union and the International Postal Union. Mr. Lumley said that he looked forward to closer co-operation between his country and Nigeria in the field of telecommunications. The minister was accompanied on the visit by the Canadian High Commissioner to Nigeria, Mr. Clayton Bullis. [Text] [Kaduna NEW NIGERIAN in English 13 Apr 81 p 22]

CSO: 5300/5014

ZIMBABWE

BRIEFS

COMPUTER SHARING--Bulawayo--A group of Bulawayo companies have formed a consortium to provide their own computer services on a share basis. It is thought to be the first of its kind in Zimbabwe. The final contract setting up the most powerful computer installation in the country will be signed formally at a cocktail party at a city hotel next week. Dunlop Zimbabwe Ltd, Treger Industries (Pvt.) Ltd and G and D Shoes (Pvt.) Ltd, together with C. F. Tulley Associates, which is supplying the software (systems programmes), are the shareholders. Together they have formed a new company, Database (Pvt.) Ltd, which will supply all the data processing services for these organisations. Forty-five terminals, situated remotely from the computer in the premises of the consortium will give immediate access to information about stock, raw materials, debtors, creditors and wages. A wages system for the companies involved goes "live" at the beginning of next month. [Text] [Salisbury THE HERALD in English 6 May 81 p 3]

CSO: 5500

NORWEGIAN SHIPS JOIN SWEDEN'S MARITEX TELEX SYSTEM

Oslo NORGES HANDELS OG SJOFARTSTIDENDE in Norwegian 11 Mar 81 p 10

[Article by Bjorn Mohrling Petterson: "Norwegian Ships to Use Swedish Telex-System"]

> [Text] Finally Norwegian ships and shipping companies will be getting access to the Swedish MARITEX-system for automatic telecommunications between ships and land.
>
> --In a few weeks an agreement for joint Nordic use of our MARITEX-system will be signed--according to Seth Myrby, director of the Swedish Telecommunications Administration. The agreement will enable Norwegian ships and shipping companies to send and receive telex information automatically in the same way as via satellite--added Myrby.

Cheapter than Satellite

The MARITEX-system that may be unique, can justifiably be considered a competitor to the satellite-telex. Today, MARITEX is used by almost 200 vessels from approximately 10 countries. Other advantages of the MARITEX are that the radio terminal that must be placed on board the ship is much less costly than the satellite equipment, Myrby informs us. Besides, the commercial rate will be lower.

Data Machine in Boteborg

The center for the MARITEX-system is at the coastal radio station, Goteborg Radio. A large computer handles and controls the telex traffic in both directions between ships and land.

Alf Persson, the day director of MARITEX, informs us that the coast station only needs one radio dispatcher (telegraph operator) to operate the system which handles between 600 and 100 reports daily.

Today, MARITEX-terminals are installed in approximately two-thirds of the Swedish ships engaged in foreign trade. The effectiveness of the system can be best described by mentioning that approximately 90 percent of the tele-communication traffic reaches the vessel within one hour--confirms Persson and adds that the system works indirectly--that is to say, the shipping company (the sender) delivers the telex information to the data machine which instantly begins to seek contact with the ship. When contact is established, the information is sent automatically on board.

Rogaland Enters into the Agreement

Furthermore, it is disclosed that the Nordic agreement also opens up the possibility of using the shipboard MARITEX-equipment to establish manual contact with other coastal stations. The equipment will be able to contain most of the telex channels of the respective coastal radio stations.

Free Sale/Rent

Up to now it has only been possible to rent MARITEX-terminals from the Swedish Telegraph Administration for installation of board ships. In accordance with the Nordic agreement, the commercial terms will be considerably more lenient as the shipping company will be allowed to buy or rent the necessary equipment from their regular supplier.

According to what we have learned, SRT in Sweden and the Danish companies, S.P. Pedersen (SAILOR) and Dansk Radio A/S are currently engaged in producing a new line of MARITEX-equipment--which, among other things, complies with the new technical minimum requirements which now are being formulated by a working group within the Nordic communication administration.

According to what we have been given to understand, the computer system in Goteborg has already incorporated the capacity to transmit traffic from various Nordic overseas vessels. The system can handle a total of 12 connections simultaneously.

Begin in April

According to Director Myrby no special changes are needed for the data installation. Norwegian ships are free to acquire the equipment when the Norwegian authorities give the go ahead (probably as of April).

However, one should be aware of the fact that there has been a great demand for MARITEX-terminal equipment recently--such as from ships in other countries--and delivery problems can be expected, admits Director Myrby. Myrby also confirms thet the Swedish Telegraph Administration has ordered MARITEX-transmitter equipment from two Danish manufacturers.

Layoffs to be Expected?

Representatives from the Danish Post and Telegraph Administration disclose that a certain amount of uneasiness is feared at the Lyngby radio as it is envisioned that the MARITEX-agreement will eliminate the need for personnel at the coastal radio station.

In the Federation of Telegraph Operators which organizes most of the telegraph operators at the Rogaland Radio--the vice-chairman, Viggo Kristiansen, today disclosed that people are resentful that neither the federation onr the employees were consulted. We feel we have been deprived of our rights--and now demand to get an immediate and complete orientation from the Telegraph Commission. If the MARITEX-system is used on as large a scale as it is on Swedish ships, we envision that over 40 telegraph operators can risk losing their jobs, says the vice-chairman. Today, 15 to 16 operators are engaged daily in the manual telex-transmitting at the Rogaland radio, we are told.

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CSO: 5500/2182

BRIEFS

TELSET IN TAMPERE--Experimental operation of Tampere Telset began officially on Monday. The first viewing contract was made by the Tampere municipality, and the equipment was received by Municipal Director Pekka Paavola on behalf of the city. In the early stages of experimental operations, there will be approximately 600 Telset information frames. The goal is to have a stock of about 2000 frames by the end of 1981. Telset is sponsored in Tampere by Tampereen Kirjapaino Oy [Tampere Printing Co], which publishes the morning newspaper AAMULEHTI, and the Tampere Telephone Cooperative. During 1982, the partners will make a decision on the scope of continuing operations. Managing Director Vaino J. Nurmimaa, who is the chairman of the Sanomalehtien Liitto [Association of Newspapers], stated in his speech at the Telset opening ceremony that we are unavoidably faced with a need to reformulate our thinking about the freedom of the press. Finland is marching into the Telset era step-in-step with the world's leading country in this field, England. The newspapers have honorably tended to their tasks on the basis of the so-called Old Freedom of the Press Law. Their readers have believed in the printed word. So the press has a contribution to make when new concepts regarding freedom of the press are being developed to include and be based on the new electronic equipment, Nurmimaa stated. [Text] [Helsinki HELSINGIN SANOMAT in Finnish 31 Mar 81 p 27] 9571

TELSET COMPLETES FIRST YEAR--Helsinki Telset Oy has progressed at a brisk pace during its first regular year of operations. The number of users has gone up to 183, which is over 100 more than a year ago. The information content of the system has grown by about a quarter and now includes 12,300 information frames. Out of these, 70 percent are open to all viewers and the rest are in internal use by various businesses. Among the most typical users of the Telset services, in addition to business and industrial enterprises, are banks, newspaper companies, schools and various organizations. The Helsinki Telset was founded by the Helsinki Telephone Company, Nokia Oy and Sanoma Oy and begun as a cooperative project in 1978. [Text] [Helsinki HELSINGIN SANOMAT in Finnish 24 Mar 81 p 28] 9571

CSO: 5500/2188

NEW TYPE MOBILE SATELLITE GROUND RECEIVER DEMONSTRATED

Oslo AFTENPOSTEN in Norwegian 27 Mar 81 p 4

[Article by Kristin Nilsen: "First Time in Norway: Russian Television Via Satellite"]

> [Text] For the first time, pictures from Russian television were received in Norway last night. They arrived via the Russian satellite "Horisont," and one of the firms that supply cable television to Norway sponsored the transmission. A sparkling clear picture, we could see a Russian film about World War II. The sound was also irreproachable.

At the same time a completely new type of portable satellite receiver that will be on the market at the earliest in 1984 was demonstrated. These small receivers are up to 90 centimeters in diameter and they can be bought by the public for 3,500 kroner from the nearest radio shop.

"Technically there is no reason why Norwegian television viewers cannot receive transmissions from almost the whole world within a couple of days. It took only 2 hours to put up the 3-meter-high parabolic antenna that we used to get the Russian television," says Gunnar Briebol, director of sales for Bosch/Norge.

"And it will be even easier when the new portable satellite receiver comes on the market. Today we are dependent upon being connected to a cable television net in order to participate in the expanded television that will come. In a few years one can simply walk into the nearest radio shop and buy one's own satellite receiver," says Briebol.

"In order to meet the competition from the satellite programs and video cassettes, NRK is in the process of drawing up plans for regional television programs," disclosed Otto Nes, program director for the television program "Pa Sparket," on Tuesday.

"The plan is to build up three regional central stations in Tromso, Trondheim and Bergen, that will produce television programs for their respective regions. Oslo will handle the Ostlandet and the Sorlandet. The equipment for such transmissions is already installed in Oslo," Nes told NTB.

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DATE FILMED

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